

**Amendments to the Drawings:**

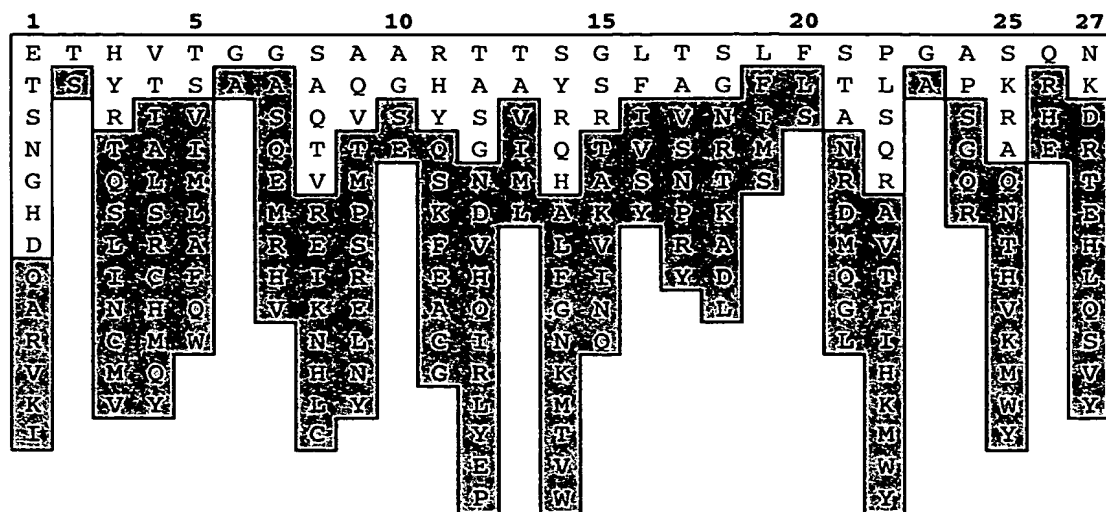
Enclosed are formal drawings.

Attachment: Replacement Sheets



Application No. 09/463,098  
 Amdt. Dated Aug. 16, 2004  
 Reply to Office Action of May 18, 2004  
 Replacement Sheet

A



B

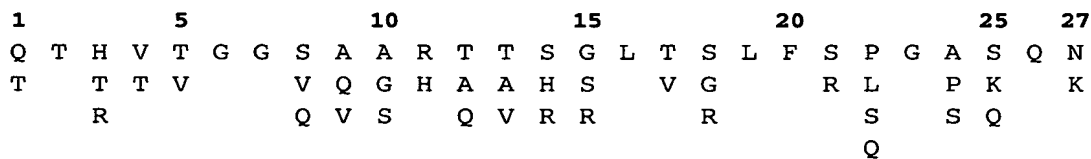


Fig. 1

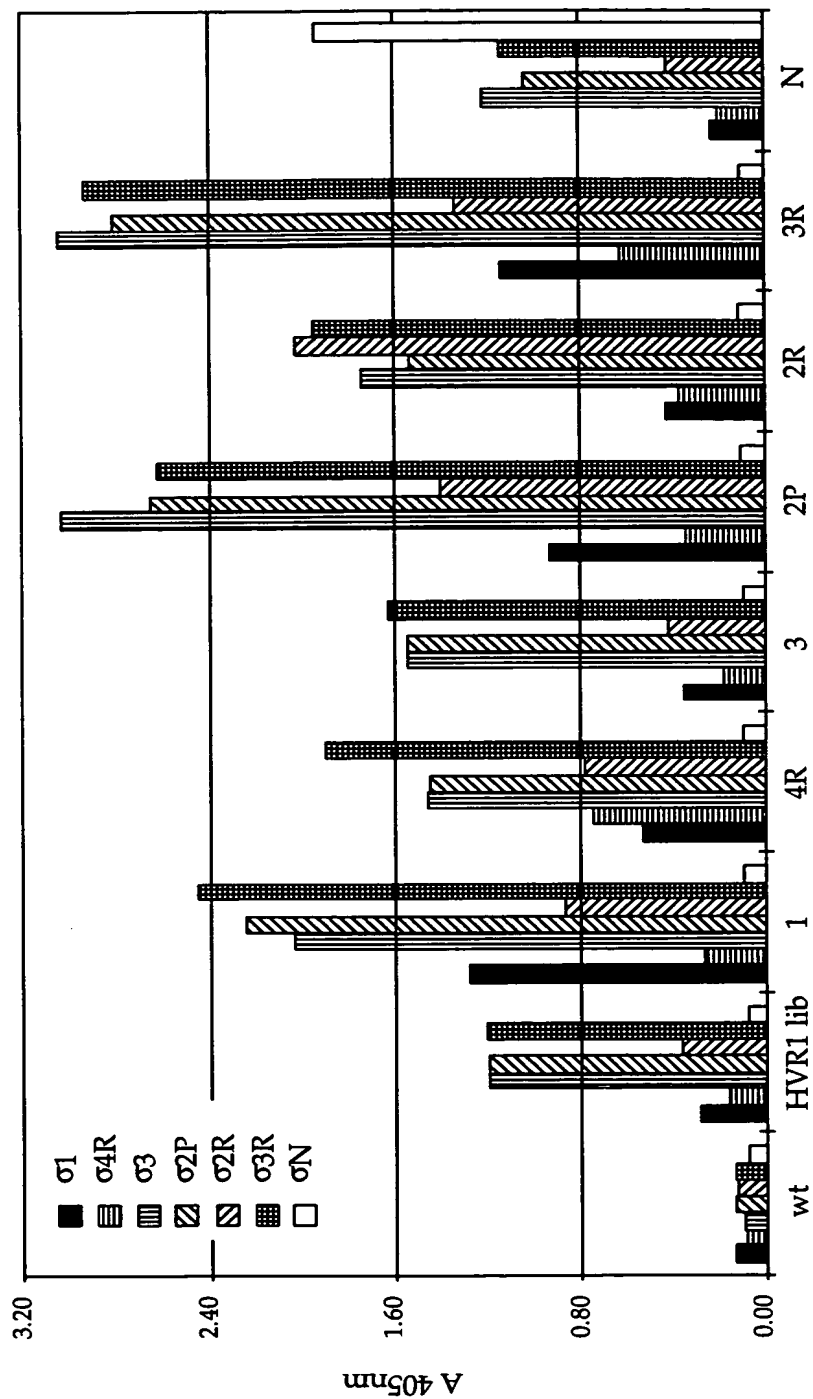


Fig. 2

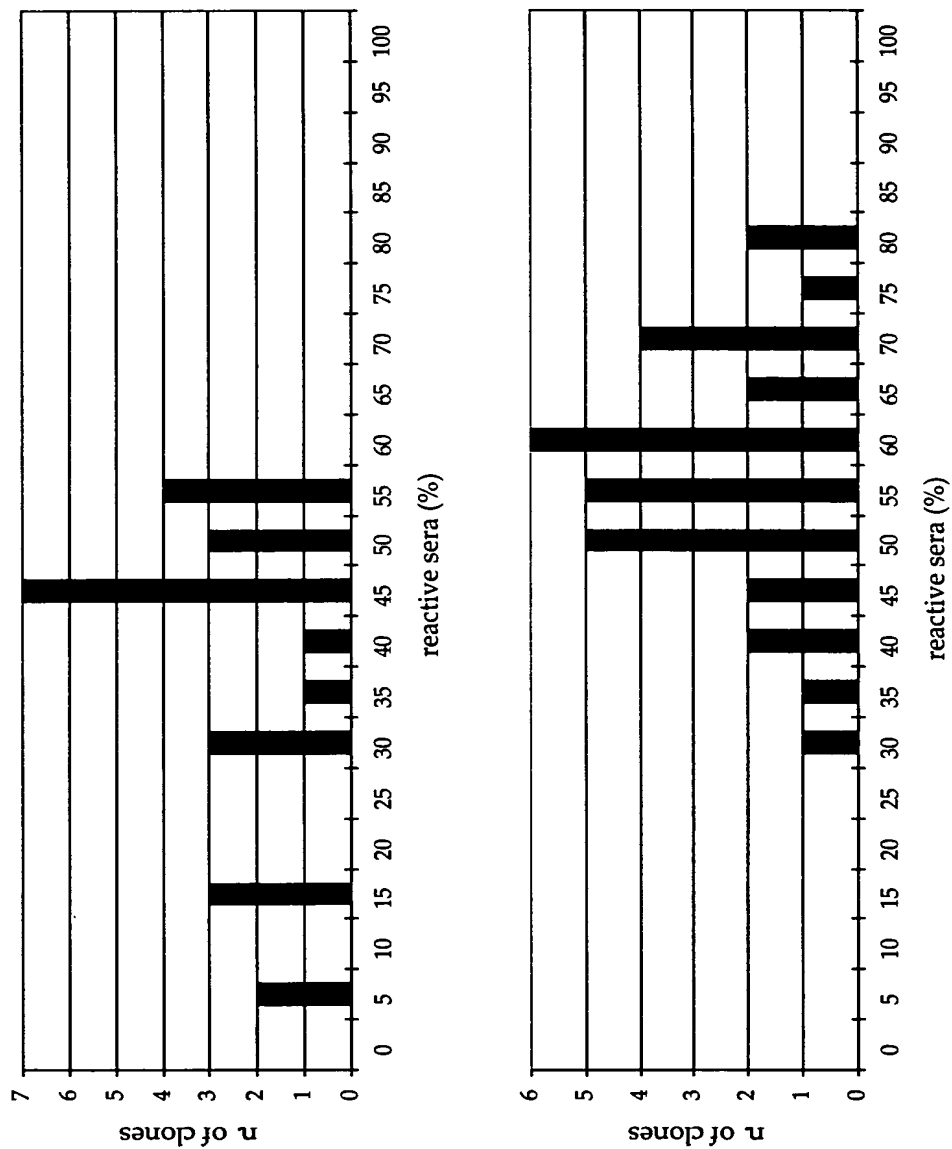


Fig. 3



Application No. 09/463,098  
Amdt. Dated Aug. 16, 2004  
Reply to Office Action of May 18, 2004  
Replacement Sheet

A

|           | R9   | H1   | M63  | M122 |             |
|-----------|------|------|------|------|-------------|
| C7        | 0.14 | 0.13 | 0.00 | 0.22 |             |
| C8        | 1.67 | 1.83 | 1.05 | 0.38 |             |
| C9        | 2.30 | 0.65 | 0.21 | 0.11 |             |
| C10       | 1.23 | 1.30 | 0.71 | 0.64 |             |
| C12       | 0.16 | 1.26 | 0.20 | 1.09 |             |
| C13       | 0.90 | 2.06 | 0.57 | 0.19 |             |
| C14       | 0.47 | 0.63 | 1.09 | 2.27 |             |
| C17       | 1.48 | 1.35 | 1.00 | 0.00 |             |
| C23       | 0.00 | 0.88 | 2.65 | 0.00 |             |
| C27       | 0.00 | 0.00 | 0.00 | 3.17 |             |
| C28       | 2.98 | 0.15 | 0.00 | 1.98 |             |
| C29       | 0.00 | 0.00 | 2.85 | 1.17 |             |
| C30       | 0.18 | 0.00 | 2.85 | 1.17 |             |
| C40       | 3.17 | 1.84 | 0.20 | 2.96 |             |
| C48       | 3.07 | 2.58 | 0.00 | 2.56 |             |
| C49       | 0.12 | 0.00 | 0.00 | 0.00 |             |
| C50       | 0.00 | 0.00 | 0.12 | 0.00 |             |
| C56       | 0.33 | 0.12 | 0.00 | 0.00 |             |
| C58       | 2.85 | 1.42 | 0.38 | 0.35 |             |
| C62       | 0.00 | 0.00 | 0.13 | 0.00 |             |
| frequency | 75%  | 70%  | 70%  | 70%  | total: 100% |

B

|           | R9   | H1   | M63  | M122 |             |
|-----------|------|------|------|------|-------------|
| 1V        | 0.49 | 2.51 | 0.00 | 0.20 |             |
| 2V        | 0.00 | 0.19 | 0.11 | 0.00 |             |
| 3V        | 0.65 | 1.90 | 1.73 | 0.62 |             |
| 4V        | 0.25 | 0.00 | 0.00 | 0.29 |             |
| 5V        | 1.75 | 2.47 | 0.31 | 0.00 |             |
| 7V        | 0.60 | 1.09 | 1.16 | 0.88 |             |
| 8V        | 0.30 | 0.88 | 0.00 | 0.00 |             |
| 9V        | 0.00 | 0.59 | 0.00 | 0.00 |             |
| 10V       | 0.58 | 0.11 | 1.98 | 0.00 |             |
| 1P        | 0.00 | 0.00 | 0.00 | 0.33 |             |
| 5P        | 0.24 | 0.28 | 0.44 | 0.00 |             |
| 6P        | 0.47 | 1.54 | 0.27 | 0.31 |             |
| 7P        | 0.78 | 1.33 | 1.00 | 0.00 |             |
| 8P        | 0.68 | 0.57 | 0.14 | 0.38 |             |
| 10P       | 1.20 | 1.12 | 0.81 | 0.88 |             |
| 11P       | 0.32 | 0.44 | 0.00 | 0.22 |             |
| 12P       | 1.50 | 1.08 | 0.84 | 0.90 |             |
| 13P       | 0.49 | 0.00 | 0.00 | 0.31 |             |
| frequency | 83%  | 83%  | 61%  | 61%  | total: 100% |

C

|           | R9   | H1   | M63  | M122 |            |
|-----------|------|------|------|------|------------|
| X1        | 0.00 | 0.00 | 0.00 | 0.00 |            |
| X2        | 1.37 | 0.17 | 0.21 | 0.68 |            |
| X3        | 0.15 | 0.56 | 0.38 | 0.00 |            |
| X4        | 0.00 | 0.00 | 0.00 | 0.00 |            |
| X5        | 0.00 | 0.14 | 0.00 | 0.00 |            |
| X6        | 0.25 | 0.00 | 0.00 | 0.31 |            |
| X7        | 0.66 | 0.83 | 0.60 | 0.34 |            |
| X8        | 1.04 | 1.31 | 0.98 | 0.45 |            |
| X9        | 0.96 | 0.21 | 0.00 | 0.00 |            |
| X10       | 0.00 | 0.00 | 0.00 | 0.00 |            |
| X11       | 0.74 | 0.33 | 0.11 | 0.91 |            |
| X12       | 0.00 | 0.00 | 0.00 | 0.00 |            |
| X13       | 2.30 | 0.18 | 0.54 | 0.00 |            |
| X14       | 1.20 | 0.00 | 0.00 | 0.00 |            |
| X15       | 2.38 | 0.00 | 0.00 | 1.60 |            |
| X16       | 1.92 | 2.30 | 1.86 | 2.19 |            |
| X17       | 0.00 | 0.00 | 0.00 | 0.00 |            |
| X18       | 0.00 | 0.00 | 0.00 | 0.00 |            |
| X19       | 0.00 | 0.00 | 0.00 | 0.00 |            |
| X20       | 0.47 | 0.33 | 0.26 | 0.00 |            |
| X21       | 0.00 | 0.86 | 1.45 | 1.96 |            |
| X22       | 0.37 | 0.44 | 0.44 | 0.12 |            |
| X23       | 0.61 | 0.60 | 0.10 | 0.00 |            |
| X24       | 0.00 | 0.00 | 0.80 | 0.73 |            |
| X25       | 0.00 | 0.00 | 0.00 | 0.47 |            |
| X26       | 0.00 | 0.00 | 0.00 | 0.00 |            |
| X27       | 0.00 | 0.00 | 0.00 | 0.00 |            |
| 1NV       | 0.00 | 1.50 | 0.22 | 0.00 |            |
| 2NV       | 0.00 | 0.40 | 0.23 | 0.00 |            |
| 3NV       | 0.10 | 0.11 | 0.00 | 0.00 |            |
| 4NV       | 0.00 | 0.00 | 0.00 | 0.00 |            |
| 5NV       | 0.00 | 0.00 | 0.00 | 0.00 |            |
| 6NV       | 0.00 | 0.00 | 0.00 | 0.00 |            |
| 11NV      | 0.10 | 0.00 | 0.00 | 0.53 |            |
| 12NV      | 0.00 | 0.00 | 0.41 | 0.00 |            |
| 13NV      | 0.00 | 0.00 | 0.00 | 0.00 |            |
| 15NV      | 0.12 | 0.00 | 0.00 | 0.19 |            |
| 16NV      | 0.52 | 0.84 | 0.36 | 0.60 |            |
| 17NV      | 0.64 | 0.52 | 0.41 | 1.14 |            |
| 3P        | 0.00 | 0.00 | 0.00 | 0.00 |            |
| 4P        | 0.00 | 0.00 | 0.00 | 0.00 |            |
| frequency | 46%  | 44%  | 41%  | 37%  | total: 63% |

Fig. 4

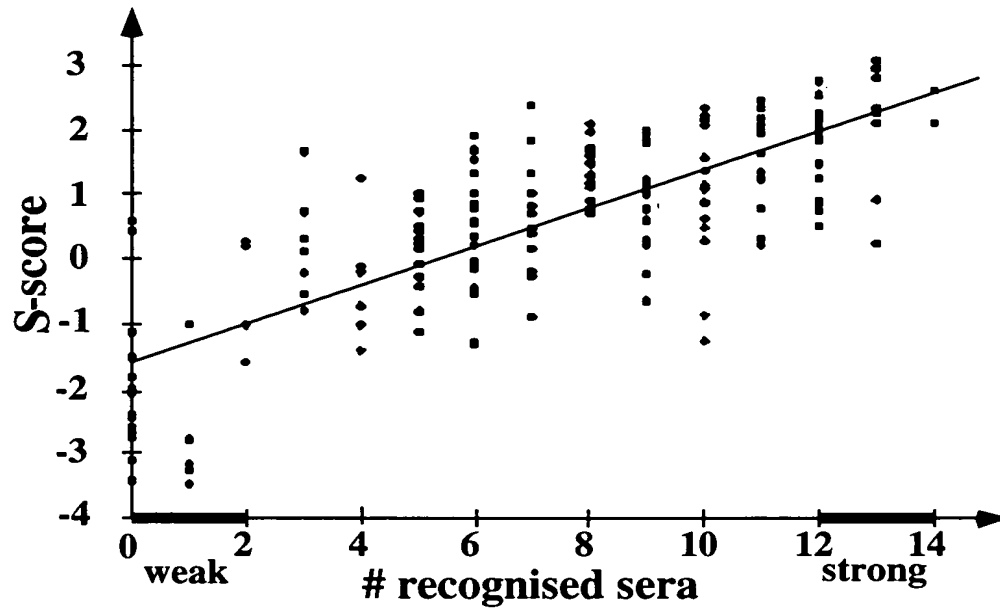


Fig. 5



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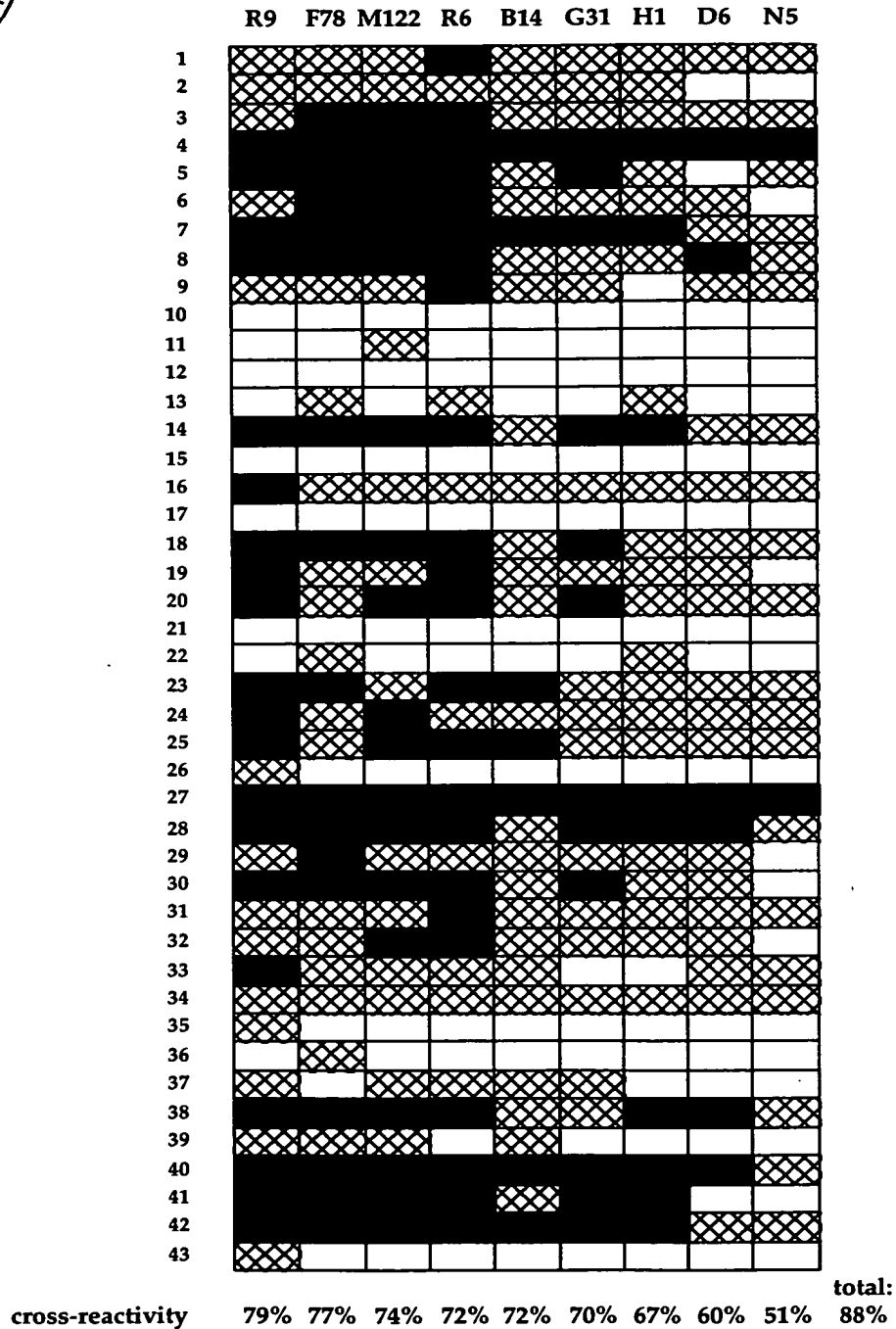
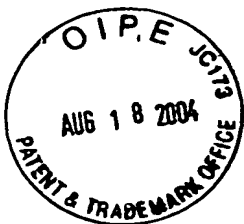


Fig. 6



A

| mimotope | sequence                     |
|----------|------------------------------|
| N5       | TTTTTGGVQGHTTRGLVRLFSLGSKQN  |
| R6       | TTTTTGGQVGHQTSGLTGLFSPGAQQN  |
| D6       | QTTTTGGQVSHATHGLTGLFSLGPQQK  |
| R9       | QTTTVGGSQSHTVRGLTSLFSPGASQN  |
| H1       | QHTTTGGVVGHATSGLTSLFSPGPSQK  |
| G31      | TTHTVGGSVARQVHSLTGLFSPGPQQK  |
| M122     | QTTTTGGSASHAVSSLTGLFSPGSKQN  |
| B14      | QTTVTG-QASHTTSSLTGLFSPGASQK  |
| F78      | QHTTTGGQAGHQAHSALTGLFSPGAKQN |

B

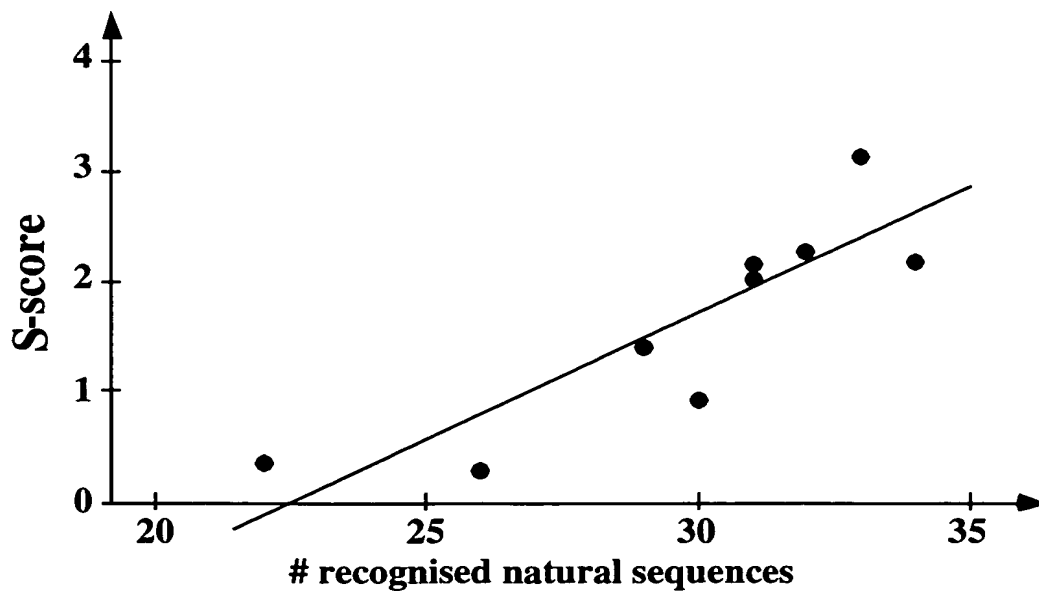


Fig. 7

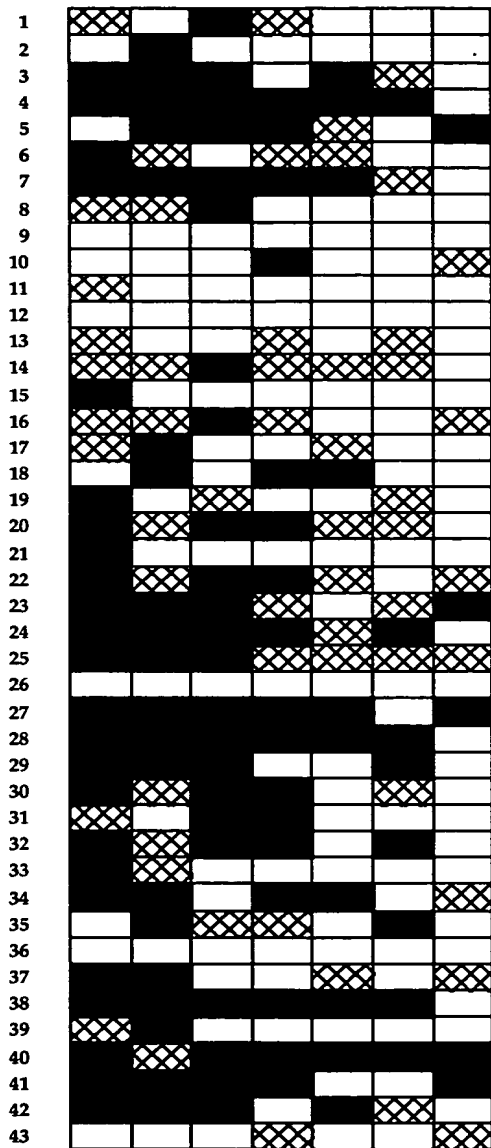




A

mimotope G31 F78 R9 D6 M122 H1 N5

titre (x100) 330 1000 330 130 10 33 5

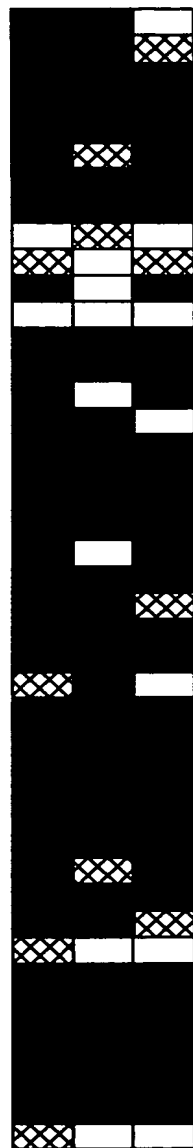


cross-reactivity 77% 70% 60% 60% 44% 42% 28% **total: 91%**

B

MIX3 MIX1 MIX2

45 25 30



95% 84% 84%

Fig. 8



B14 QTTVT.GQASHTTSSLTGLFSPGASQK  
B24 TTTTVGGQASHTTSSLTGLFSPGASQK  
D6 QTTTTGGQVSHATHGLTGLFSLGPQQK  
E19 TTHT.GGQQAHTTSRLVSLFSPGASQK  
F78 QTHTTGGQAGHQAHSLTGLFSPGAKQN  
G31 TTHTVGGSVARQVHSLTGLFSPGPQQK  
H1 QTHTTGGVVGHATSGLTSLFSPGPSQK  
M63 QTHTTGGVVSHQTRSLVGLFSPGPQQN  
M122 QTTTTGGSASHAVSSLTGLFSPGSKQN  
R6 TTTTGGQVGHQTSGLTGLFSPGAQQN  
R9 QTTVVGGSQSHTVRGLTSLFSPGASQN

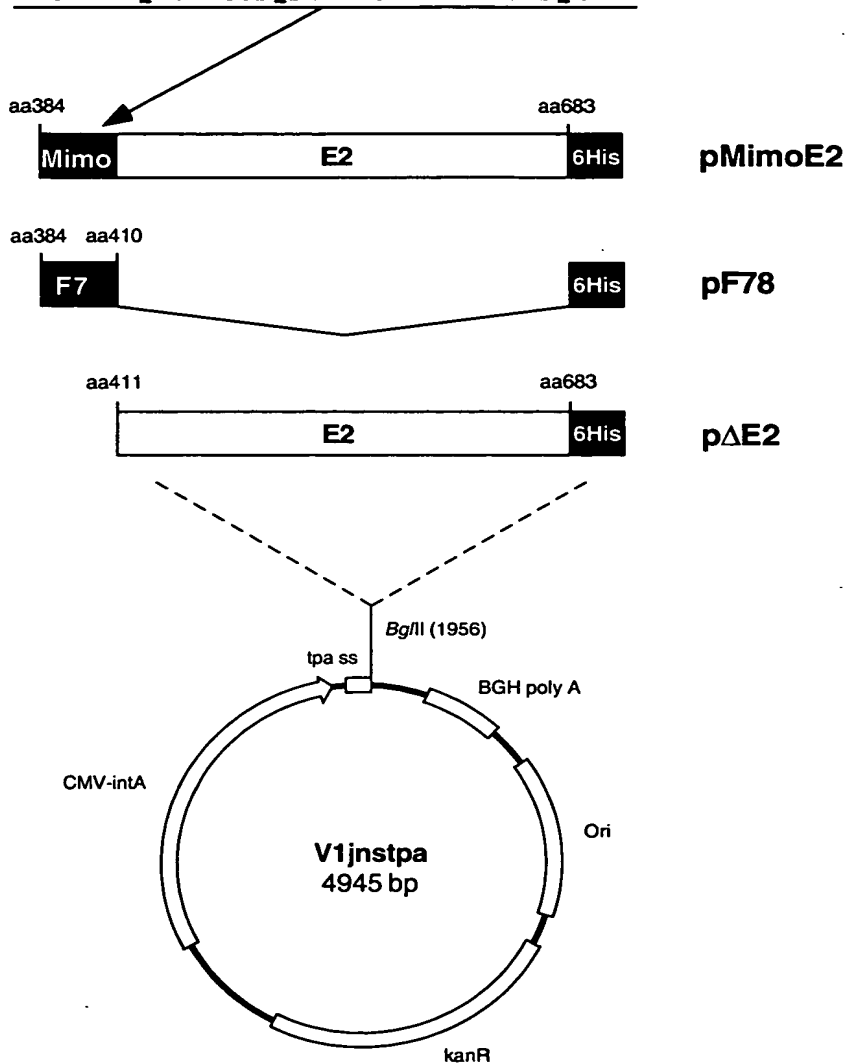


Fig. 9